

### REMARKS

Applicants note that the transaction history in PAIR indicates that the period for response was restarted on April 6, 2006. Therefore, Applicant submits that this response is being filed within two months of the mailing date of the final action and is entitled to the procedure set forth at, section 12, on page 8 of the Official Action, in the event that an Advisory Action is mailed after July 6.

Reconsideration of this application is respectfully requested.

Paragraph [0034] is amended to correct obvious typing errors. The sentence, "However, the ratio of stepped to unstepped width may be from 1:1 to 12:1," is amended to recite, "However, the ratio of unstepped to stepped width may be from 1:1 to 12:1." The error in the original text was obvious from the context. The two immediately following sentences recite, "For example, the unstepped regions 29 may be two inches wide, followed by stepped regions 27 having a one half inch width (a 4:1 ratio). Other ratios may also be employed, including, for example, a 3:1 ratio of unstepped to stepped regions." One of ordinary skill in the art would have recognized that the exemplary 4:1 and 3:1 ratios of unstepped to stepped regions are examples of unstepped-to-stepped ratios between 1:1 and 12:1, and are not examples of stepped-to-unstepped ratios between 1:1 and 12:1. Also, the preferred embodiment in the immediately preceding sentence of the same paragraph is an unstepped-to-stepped ratio of 2:1, which is another example of an unstepped-to-stepped ratio between 1:1 and 12:1, but is not a stepped-to-unstepped ratio between 1:1 and 12:1. . One of ordinary skill would have recognized the typographical error from the three examples in the paragraph. Further, the first sentence in the paragraph states, "the depth  $D_2$  of the perfining rule 22 at the stepped tooth region 27 also preferably ranges from a depth sufficient to leave about zero to one half of the batt uncut," which is consistent with an unstepped-to-stepped ratio between 1:1 and 12:1, but would not be met by stepped-to-unstepped ratios greater than 1:1 and less than or equal to 12:1 . Therefore, based on the context of the entire paragraph [0034], the typographical error was obvious and no new matter is added.

Claims 1, 4, 5, 8, 28 and 29 were rejected under 35 U.S.C. § 102 as being anticipated by Stevie (US 6,119,439). Claims 1-5, 8, 28 and 29 were rejected under 35 U.S.C. § 103 as being unpatentable over Nakaya (US 4,781,091) in view of Stevie. Claims 7, 11 and 13 were alternatively rejected as unpatentable over Stevie or Nakaya in view of Stevie. Claims 14 and 15 were rejected as being unpatentable over Nakaya in view of Stevie and Ohara (US 5695105).

Applicants appreciate the Examiner's suggestion that the claims be amended to more clearly define the steps. Accordingly, claim 1 is amended to recite:

a rotary die cutting cylinder located along a path of the conveying means and having at least one cutting rule that severs said insulation, and having at least one perfining rule that has a plurality of unstepped regions comprising rectangular cutting portions along an edge of the perfining rule for perforating said insulation, with stepped regions comprising rectangular slots between adjacent ones of the rectangular cutting portions [emphasis added]

Support for the amendment is provided by FIGS. 3B and 7, and paragraph [0034]. The combination of Nakaya, Stevie, and Ohara neither discloses nor suggests these features.

The Action admits that Nakaya fails to disclose a perfining rule that partially cuts through the insulation. Stevie describes a cutter for a heat-sealable-pouch apparatus. A non-contact rotary knife apparatus perforates a seal area between two adjacent pouches in a continuous web by using perforating blades on the minor hub and anvils on the major hub with the anvils having elongated, spaced apart recesses for receiving but not touching the teeth of the perforating blade. The perforating blades have sharp triangular cutting teeth with well defined points. Stevie does not have rectangular cutting portions. The anvil recesses are defined in part by flat-topped areas intermediate each recess for supporting the web as the perforating blade extends therethrough. The flat topped areas intermediate each recess support the web, but do not cut the web. As Stevie notes, "Since the perforating blade pierces only one side, all paper or pouch material at the

perforations is pushed through leaving on one side a nice finished appearance.” In any event, the flat-topped support areas are not rectangular in shape. Thus, neither Stevie’s perforating blade or flat-topped areas disclose or suggest rectangular cutting portions.

Ohara was cited for describing means for conveying a first and a second adjacent separable segments at different speeds to tear the first and second separable segments apart from each other. However, Ohara fails to cure the deficiency of Nakaya and Stevie with respect to the features of amended claim 1, as discussed above.

Therefore, amended claim 1 should be patentable over the prior art of record.

All of the dependent claims should also be patentable over the prior art of record for at least the same reasons as amended claim 1. In addition, amended claim 29 and new claims 30-32 should also be separately patentable.

Claim 29 is amended to recite, “each perfining rule has stepped regions along a length thereof, with a ratio of unstepped region width to stepped region width of 2:1,” and new claim 30 recites “a ratio of unstepped region width to stepped region width between 1:1 and 12:1.” Support for new claim 30 and the amendment to claim 29 is provided by paragraph [0034]. The prior art of record neither discloses these features.

New claims 31 and 32 require that the anvil is a cylindrical roller (claim 31), and has a flat cutting surface (claim 32), respectively. Support is provided by paragraph [0037]. The cited prior art neither discloses nor suggests these features. As discussed above, Stevie’s anvil has recesses defined in part by flat-topped areas intermediate each recess. These flat-topped areas are generally trapezoidal in shape, and are neither a cylindrical roller (as required by claim 31) or a flat cutting surface (as required by claim 32). Because Stevie's cutting teeth do not contact the anvil, none of Stevie's anvil is a cutting surface as required by claim 32.

New claim 33 requires that the rotary die cutting cylinder compresses the insulation. Support is provided at paragraph [0035]. In claim 33, the rectangular cutting portions of the perfering rule compress the insulation. Stevie's perforating blade has triangular teeth that shear the pouch web material, instead of compressing it. Because Stevie ensures that his cutting teeth do not contact his anvil, compression of the web does not occur between the teeth and the anvil.

Thus, claims 29-33 should be separately patentable from the independent claim, and should be allowed.


Withdrawn method claim 18 is amended to depend on claim 1. Therefore, the method claims should be in condition for rejoinder and allowance upon allowance of claim 1.

In view of the foregoing amendments and remarks, Applicant submits that this application is in condition for allowance.

The Assistant Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account **04-1679**.

Respectfully submitted,

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